UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

February 13, 2013

Mr. William R. Henderson
District Planning and Environmental Manager
Florida Department of Transportation
1109 S Marion Avenue
Lake City, Florida 32025-5874

SUBJECT: Draft Environmental Impact Statement for the U.S. 301 (State Road 200) Project from CR 277 to CR 233in Bradford County, Florida
CEQ No. 20120375

Dear Mr. Henderson:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (EIS) in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act (NEPA). The Florida Department of Transportation (FDOT) and the Federal Highway Administration (FHWA) propose to construct a roadway project to relieve congestion on the S.R. 200/U.S. 301 corridor within the City of Starke caused by heavy truck traffic volumes and to provide additional capacity for future traffic growth. The logical termini for the proposed project extend from north of C.R. 227 to C.R. 233 in Bradford County, Florida.

The proposed build alternatives include an Urban Alternative, widening U.S. 301 from a four-lane divided facility to a six-lane divided urban facility, and a Rural Alternative that is a new limited access four-lane bypass facility to the west of Starke. The project alternatives vary in length from 7.2 to 7.3 miles, respectively. The Urban Alternative includes bridge widening at Prevatt Creek and new bridge construction at Alligator Creek, C.R. 100A and the CSX railroad spur. The Rural Alternative includes new bridge construction at Alligator Creek, C.R. 100A, the CSX railroad spur, C.R. 229, and Water Oak Creek. The Rural Alternative is anticipated to include interchanges at S.R. 100 and S.R 16. The No Build alternative which does not meet the purpose and need provides a baseline to compare and measure the effects of the Build Alternatives. The Rural Alternative was identified as the locally preferred alternative in the Draft EIS.

The EPA has some environmental concerns regarding potential direct, indirect, and cumulative impacts of the project. The EPA is providing comments on social and economic impacts, air quality, noise impacts and mitigation, wetlands, water quality, contamination, and floodplains which occur in the project area. Additional comments regarding cumulative impacts are provided.

In order to meet the requirements of the Clean Water Act Section 404(b)(1) Guidelines, FDOT must demonstrate that the discharge of dredged or fill materials into jurisdictional waters of the United States is unavoidable and that the least environmentally-damaging practicable alternative (LEDPA) that will fulfill the basic project purpose has been selected. The EPA generally attempts to recommend an alternative (or alternatives) that might be appropriate to meet the requirements of the National Environmental Policy Act (NEPA) and the 404(b)(1) Guidelines. However, based on the information provided in the Draft EIS, the EPA cannot recommend one Build Alternative over the other. The Urban Alternative results in a greater number of property relocations, impacts more contamination sites, impacts more sensitive noise receptors, impacts historical structures and cultural resources, and has more overall social impacts. The Rural Alternative results in a greater impact to wetlands and may also result in development along the corridor which is currently predominantly undeveloped land. The EPA is concerned that the Draft EIS does not provide a proper assessment or selection of the Rural Alternative as the LEDPA, as required. The Final EIS should include an analysis of all project impacts and a matrix which illustrates impacts associated with each Build Alternative.

The EPA has identified environmental impacts that must be avoided in order to provide adequate protection of the environment. These impacts are detailed in the enclosed comments. The EPA rates the overall project EC-2 (enclosed is a summary of definitions for EPA ratings). We have concerns that the alternatives will have impacts on the environment that should be avoided and minimized. Corrective measures may require changes to the alternatives or application of additional mitigation measures that can reduce the environmental impact.

As indicated in the enclosed detailed comments, the EPA is requesting that FHWA provide clarifications, supplementary information, and explanations of certain conclusions found in the Draft EIS. The preferred alternative should be identified in the Final EIS, along with mitigation details to address the potential impacts of the preferred alternative.

Thank you for the opportunity to review the proposed action and comment on this Draft EIS. If you have any questions or would like to discuss the EPA's comments, please contact Madolyn Dominy at (404)562-9644.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office

Enclosures

cc: Federal Highway Administration – Florida Division
U.S. Army Corps of Engineers – Jacksonville District
U.S. Fish and Wildlife Service – Jacksonville Office
National Marine Fisheries Service – Southeast Regional Office
Florida Department of Environmental Protection
Florida Fish and Wildlife Conservation Commission

U.S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL IMPACT STATEMENT (EIS) RATING SYSTEM CRITERIA

EPA has developed a set of criteria for rating Draft EISs. The rating system provides a basis upon which EPA makes recommendations to the lead agency for improving the draft.

RATING THE ENVIRONMENTAL IMPACT OF THE ACTION

$ LO (Lack of Objections): The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action.

$ EC (Environmental Concerns): The review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact.

$ EO (Environmental Objections): The review has identified significant environmental impacts that should be avoided in order to adequately protect the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). The basis for environmental objections can include situations:

1. Where an action might violate or be inconsistent with achievement or maintenance of a national environmental standard;
2. Where the Federal agency violates its own substantive environmental requirements that relate to EPA's areas of jurisdiction or expertise;
3. Where there is a violation of an EPA policy declaration;
4. Where there are no applicable standards or where applicable standards will not be violated but there is potential for significant environmental degradation that could be corrected by project modification or other feasible alternatives; or
5. Where proceeding with the proposed action would set a precedent for future actions that collectively could result in significant environmental impacts.

$ EU (Environmentally Unsatisfactory): The review has identified adverse environmental impacts that are of sufficient magnitude that EPA believes the proposed action must not proceed as proposed. The basis for an environmentally unsatisfactory determination consists of identification of environmentally objectionable impacts as defined above and one or more of the following conditions:

1. The potential violation of or inconsistency with a national environmental standard is substantive and/or will occur on a long-term basis;
2. There are no applicable standards but the severity, duration, or geographical scope of the impacts associated with the proposed action warrant special attention; or
3. The potential environmental impacts resulting from the proposed action are of national importance because of the threat to national environmental resources or to environmental policies.

RATING THE ADEQUACY OF THE ENVIRONMENTAL IMPACT STATEMENT (EIS)

$ 1 (Adequate): The Draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

$ 2 (Insufficient Information): The Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the Draft EIS, which could reduce the environmental impacts of the proposal. The identified additional information, data, analyses, or discussion should be included in the Final EIS.

$ 3 (Inadequate): The Draft EIS does not adequately assess the potentially significant environmental impacts of the proposal, or the reviewer has identified new, reasonably available, alternatives, that are outside of the spectrum of alternatives analyzed in the Draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. The identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. This rating indicates EPA's belief that the Draft EIS does not meet the purposes of NEPA and/or the Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised Draft EIS.

EPA Region 4 Comments
U.S. 301 (State Road 200)
CR 227 to CR 233, Bradford County, Florida
Draft Environmental Impact Statement (DEIS)
CEQ No. 20120375

Overview

The U.S. 301 project is proposed to relieve congestion on the S.R. 200/U.S. 301 corridor within the City of Starke caused by heavy truck traffic volumes and to provide additional capacity for future traffic growth. Other objectives of the project are to improve the U.S. 301 corridor to Florida Strategic Intermodal System (SIS) design standards and to improve safety on the route. The logical termini for the proposed project extend from, just north of C.R. 227 to C.R. 233.

EPA understands that proper growth and land use planning is critical to economic growth, developing healthy communities, and protecting the environment all at the same time. It also recognizes that the primary responsibility for land use decisions is at the local level. Therefore, suggestions and recommendations are offered that should assist state agencies, federal agencies, and communities to balance the transportation needs with the project impacts to reach a sound financial decision.

General

The Summary (pg. Summary-3) lists the U.S. Army Corps of Engineers (USACE) as a cooperating agency in the review of the DEIS. The EPA, in its communication with USACE, understands that there was no concurrence from the USACE prior to issuance of the DEIS.

The Summary (pg. Summary-4) also states that wetlands minimization efforts will include structures across wetland areas and other design features that reduce fill in wetlands and maintain surface and groundwater flow across project corridors. These design details will be developed in coordination with permitting agencies. Proper coordination with permitting agencies will need to include various concurrence points to ensure that design details include proper avoidance and minimization measures.

The Summary, in discussion of short-term impacts versus long-term environmental benefits, states that mitigation of wetland impacts and treatment of storm water runoff will be permitted so that the proposed alternatives will not add to past impacts, thereby, avoiding cumulative effects. It goes on to state that cumulative impacts from storm water runoff from past development activities are expected to be partially rectified through capture of storm water in the urban area and treatment with from off from the improved roadway. The definition of cumulative impact is "the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." The statement in the summary paragraph only mentions past impacts which is an incorrect assessment of cumulative impacts. Also the mention of storm water runoff from the urban area

and existing roadway only is incorrect due to the rural alternative being identified as the locally preferred alternative. These statements should be corrected or clarified.

Social and Economic and Environmental Justice

The Draft EIS assesses the possible social and economic impacts of the project alternatives (Urban and Rural Alternatives). This assessment includes social effects, economic effects, land use effects, mobility effects, aesthetics effects, relocation effects (residential and business), and environmental justice.

Overall, the DEIS includes a good assessment of social and economic impacts of the proposed project alternatives. The highlighted concerns include economic impacts (both alternatives), residential relocations and business displacements, and environmental justice for minority and low-income populations.

Executive Order 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 11, 1994) and its accompanying memorandum's primary purpose is to ensure that "each Federal agency shall make achieving environmental justice (EJ) part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations…"

EPA assessed whether FDOT and FHWA analyzed the environmental effects of the proposed action on minority communities and low-income communities within the City of Starke and Bradford County. Based on EPA's review, FHWA and FDOT primarily used Census data to analyze the demographics and effects of the proposed project. Table 4.3 includes the characteristics of potentially impacted populations for both alternatives. The area impacted by the Rural Alternative is estimated to have a lower proportion of low income, minority, handicapped or disabled and elderly households than the Urban Alternative.

FDOT initiated an extensive public involvement process prior to the corridor analysis phase and has continued this through the preliminary engineering phase. The process was designed to establish and maintain an open communication with concerned citizens and governmental agencies concerned with the project and its potential impacts. Citizen concerns regarding right-of-way, residential and business relocations, and economic impacts should be addressed through the public involvement process and taken into consideration when selecting a final alternative.

EPA recommends that environmental justice principles and procedures be implemented to: make better transportation decisions that meet the needs of all people; design transportation facilities that fit more harmoniously into communities; enhance the public-involvement process, strengthen community-based partnerships, and provide minority and low-income populations with opportunities to learn about and improve the quality and usefulness of transportation in their lives; and avoid disproportionately high and adverse impacts on minority and low-income populations.

Cultural Resources/Historic Preservation

EPA recognizes that the project has the potential to affect cultural resources. The Draft EIS include the identification and evaluation of what cultural resources are known or expected to be located in the area of each alternative. It also includes a summary of potential impacts to cultural resources (Table 4.4) for the proposed build alternatives. EPA is aware of the ongoing consultation with the State Historic Preservation Officer. Therefore, EPA defers to the parties involved in the consultation process (Section 106 consultation) to consider and to address those potential adverse effects associated with the proposed project.

Information provided in the Draft EIS identifies cultural and historic resources which could potentially be impacted by the two project alternatives. EPA recommends that FHWA include the results of any coordination or Section 106 consultation in the Final EIS. This will insure that any adverse effects to cultural/historic resources, and possible mitigation measures for adverse effects, are identified for both the Urban and Rural alignments, and taken into consideration when selecting the final alternative and options that comprise the preferred alternative identified in the Final EIS.

Air Quality

The Draft EIS notes that the proposed project will provide additional roadway capacity along a congested segment of U.S. 301 for local traffic and traffic traveling longer distances on the Florida Strategic Intermodal System (SIS). The maximum service volume with the widening alternative (Urban Alternative) will be 48,600 annual average daily traffic (AADT). The maximum service volume for the bypass alternative (Rural Alternative) will be 37,100 AADT, in addition to the existing facility service volume of 32,100 AADT.

The proposed project is located in Bradford County, Florida, an area that is currently designated attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, EPA has no substantial comments regarding NAAQS conformity. In addition project level analyses were conducted for carbon monoxide (CO) and the results from the screening model indicate that the highest CO one-hour and eight-hour levels are not predicted to meet or exceed the NAAQS for CO with either the No Build or Build Alternatives.

EPA acknowledges the information provided in the NEPA document concerning Mobile Source Air Toxics (MSATs). The analysis provided was prepared in accordance with the 2009 FHWA Interim guidance on MSATs. From our review of the document, it was determined that a quantitative assessment of the effects of air toxic emissions impacts on human health could not be made at the project level. The amount of MSAT emissions from each of the two build alternatives and MSAT concentrations or exposures created by each of the alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. Current emissions models are not capable of serving as a meaningful emissions analysis tool for smaller projects. Therefore it is difficult to make a determination of whether any of the alternatives would have significant adverse impacts on human health with regard to MSATs.

Noise

Noise Methodology

Overall, the Draft EIS provided good background information for the public reviewer. However, some additional information is requested for the Final EIS:

Resultant Noise: The FHWA Noise Abatement Criteria (NAC) is 67 dBA (residences) and 72 dBA (businesses). We agree that residences exposed to the 66 dBA level approaching the 67 dBA criterion should be considered for mitigation. NAC should be reported as the "Leq" or "equivalent noise level" over some timeframe, usually one hour ("Leq(1)"), as opposed to any other noise metric ("L10" or Ldn") or instantaneous measurement. The Final EIS should clarify the metric by which the NAC is being reported.

Incremental Elevation Noise: Although we understand it may be FDOT policy, EPA does not agree that +15 dBA is the best threshold for significant project incremental noise elevation. Instead, we find that +10 dBA better identifies the threshold because it represents a doubling of noise at any ambient noise (baseline) level.

Noise Abatement and Mitigation

The Draft EIS addressed the feasibility and reasonableness of noise abatement measures. Overall, the DEIS indicates that noise abatement measures for both the Urban and Rural Alternatives were not useful is some locations (e.g., could not be made long and continuous enough) or too expensive in others (exceeding FHWA's $42,000 threshold per benefitted receptor). The document states that for both alternatives "there appears to be no apparent feasible and cost-reasonable solutions available to mitigate noise impacts."

It is clear that there would be noise impacts attributable to the proposed project for both build alternatives that are not being proposed for mitigation. Because unmitigated significant noise impacts would be generated by the proposed project, EPA recommends that additional noise mitigation be considered in the Final EIS and offer the following for further consideration by FDOT:

Property Acquisition

The criteria used by FDOT for acquiring property for roadway projects should be disclosed as FDOT considers this measure in the project design phase. Would residences (or businesses) need to be actually be located within the proposed ROW before they could be acquired, or just nearby with significant project noise exposure?

Pavement Types

Recent research on pavement types has shown that reduction in tire noise is possible depending on the type of pavement used (e.g., rubberized pavement). Have such innovative types of pavement been considered?

Earthen Berms

Depending on the amount of fill available from highway cut-and-fill work (perhaps none for Florida projects), the use of earthen berms might be feasible since they would be less expensive than metal noise barriers and therefore could be used where conventional barriers are

not cost-effective. They would also be more natural and scenic to the landscape, and could be vegetated.

Truck Noise

What percentage of the project traffic will consist of trucks and can this be reduced? Although slow speed limits for cars may not be practical to reduce noise, slower speed limits for trucks may be more reasonable and should be discussed. This could be important since tire and engine noise from one truck equals the noise generated by many cars.

Combined Methods

Although individually a particular mitigative method may not reduce noise levels by -5 dBA or more, several incremental methods could cumulatively reduce levels substantially. Using more than one form of incremental mitigation should be considered and discussed in the Final EIS.

Wildlife Noise Impacts

Less research exists for noise effects on wildlife than humans. However, given that the Rural Alternative goes through rural and undeveloped land, the Final EIS should discuss noise impacts to local wildlife. Discussion should include the U.S. Fish and Wildlife Service and their State of Florida counterparts.

Construction Noise Impacts

EPA appreciates the listing of construction noise sensitive sites and agrees with adherence to construction practices to control noise and vibration impacts. Although construction noise is temporary, use of screens (hush houses) around stationary equipment and mufflers for earthmoving equipment would help attenuate noise at its source. The Final EIS should estimate the time of construction (months) to help document the magnitude of construction noise.

Wetlands

The proposed roadway has the potential for direct and indirect effects to wetlands. Wetlands avoidance was a consideration in the development of the alternatives. Of the two alternatives, the Urban Alternative will have fewer impacts to wetlands than the Rural Alternative. The Draft EIS documents wetlands acreage that is directly impacted by the alignments under consideration. Table 4.9 (pg. 4-29) compares the total wetlands impacts of each of the Build Alternatives. The table also provides the classification of wetlands according to the Florida Land Use, Cover, and Forms Classification System (FLUCCS) codes. Wetland assessment areas for the proposed Urban and Rural Alternatives are shown on Figure 4.4 (pg. 4-31) and 4.5 (pg. 4-32), respectively. The Urban Alternative will remove 4.5 acres of wetlands from productive use and the Rural Alternative will remove 81 acres of wetlands from productive use. The Rural Alternative could potentially result in additional wetlands loss due to cumulative impacts from future land use changes.

The Draft EIS also includes information regarding the estimated Uniform Mitigation Assessment Methodology (UMAM) scores for each of the Build Alternatives. The State of Florida utilizes the UMAM to determine the amount of mitigation required to offset wetland and

surface water impacts. USACE accepts UMAM as a suitable qualitative wetland assessment methodology. A comparison of the UMAM Functional Loss for the Build Alternatives is illustrated in Table 4.9 (pg. 4-29).

The U.S. Army Corps of Engineers (USACE) and the Suwannee River Water Management District (SRWMD) will claim jurisdiction over most of the identified wetlands. As a result, a jurisdictional determination for wetlands will be needed during the project design phase. An individual Clean Water Act Section 404 permit will be required from the USACE, along with an Environmental Resource Permit required from the SRWMD. EPA provides review and comment on individual Clean Water Act Section 404 permits.

The Draft EIS document discusses wetlands avoidance and minimization but it does not include qualitative and quantitative details regarding avoidance and minimization measures. More details regarding bridges and cross drains should be included in the Final EIS. The Draft EIS also states that FDOT is committed to the mitigation of all wetlands impacted as a result of the project. It states that wetland mitigation may be accomplished through a combination of methods but does not include a detailed qualitative and quantitative mitigation plan. The Final EIS should included detailed information regarding a wetlands mitigation plan. As part of the LEDPA decision, FDOT and the USACE should ensure that adequate compensatory mitigation is available for the selected alternative and after avoidance and minimization has been accomplished.

Water Quality

The Draft EIS identifies all of the receiving waters as Florida Class III waters. Surface water receptors include Alligator Creek, Prevatt Creek and Water Oak Creek, which are all located in the Santa Fe River Basin. The Santa Fe River Basin is designated a Surface Water Improvement and Management (SWIM) priority by the SRWMD. The SWIM program requires water quality and biological monitoring of the basin. Water quality in the project area is currently considered "fair".

Potential storm water pond sites for the Rural Alternative are identified in the Draft EIS because it is the locally preferred alternative. The storm water pond sites under consideration for the Rural Alternative are illustrated on Figure 4.6 (pg. 4-35). Potential storm water pond sites have not been identified for the Urban Alternative. The Draft EIS indicates that if the Urban Alternative is recommended, pond sites will be more difficult to locate because of the existing urban development, the number of sites with contamination potential, the number of cultural resources, and the potential for utility impacts.

The Final EIS should identify the specific Best Management Practices (BMPs) to be applied to attain appropriate reductions in sediment loads and what additional monitoring will be conducted to achieve pollutant reductions. Mitigation measures related to protection of water quality should be tailored depending on the condition of the specific water resource as well as the severity of the potential impacts. All appropriate steps should be taken to address potential impacts to water quality within streams and wetlands. Proper control of storm water runoff during construction will be critical. Construction activities have the potential to introduce sediments in adjacent waterbodies that could exacerbate problems relative to increasing sediment oxygen demand which affects dissolved oxygen levels. Monitoring commitments should be included to ensure that water quality and in-stream habitat are fully protected. One of the

challenges for the reduction of sediment loading from construction sites is effective compliance monitoring of all requirements specified in the permit and timely enforcement against construction sites not found to be in compliance with the permit. Storm water controls should be monitored periodically for the duration of construction and maintained to help ensure success (e.g., silt fences emptied and hay bales replaced).

To further assist in the long-term reduction of pollutant loadings to surface water resources in the project area, EPA recommends that storm water runoff from the proposed roadway be collected and treated before being discharged to surface waters. In other areas, typical BMPs, including the use of staked hay bales, silt fences, mulching and reseeding, and use of buffer zones along water bodies, are appropriate. These types of commitments should be included in the Final EIS.

EPA recommends careful consideration of all water quality impacts, including whether the preferred alignment has first avoided, then minimized impacts to water quality, and then whether there are feasible mitigation measures that will be utilized to rectify any unavoidable impacts to affected waterbodies. The Final EIS should identify whether the preferred alternative is the least environmentally damaging practicable alternative that satisfies the Purpose and Need per Clean Water Act Section 404(b)(1) Guidelines (Title 40 of the Code of Federal Regulation, Section 230).

Contamination

The Draft EIS includes information regarding the presence of potential contamination sites for both the Urban and Rural Alternatives. The contamination screening identified and evaluated the potential for soil and groundwater contamination that may exist within the limits of the proposed right-of-way for the alternatives. Table 4.11 (pg. 4-38) provides a summary of potential contamination sites rated as high, medium, and low contamination risk for both alternatives. The Urban Alternative will impact 139 sites, many of which are in the high and medium risk categories. The Rural Alternative will impact 34 sites, most of which are in the low categories. The Draft EIS also provides maps (Figures 4.7 (pg. 4-39) and 4.8 (pg. 4-40)) and tables (Tables 4.12 (pgs. 4-41 thru 4-46) and 4.13 (pgs. 4-46 thru 4-47)) which illustrate and list the potential contamination sites for both Build Alternatives.

The impacts to contamination sites will be utilized in the selection of the preferred alternative. Selection of the Rural Alternative will minimize exposure to contamination risk. The Draft EIS states that when a specific alternative is selected for implementation, site assessments will be performed to the degree necessary to determine levels of contamination and, if necessary, evaluation of the options and costs to remediate. Resolution of problems associated with contamination will be coordinated with appropriate regulatory agencies, and any appropriate action will be taken prior to construction.

EPA recommends that the Final EIS include information regarding contamination sites associated with the preferred alternative and what type of additional site assessment will be needed. It should also include what type, if any; site remediation will be needed in order for construction activities to proceed. EPA also recommends that FDOT coordinate with the appropriate regulatory agencies regarding the resolution of problems associated with contamination or remedial action activities.

Floodplains

The Draft EIS indicates that there are no regulatory floodways identified in the project area. Figures 4.9 (pg 4-49) and 4.10 (pg 4-50) illustrate the floodplains in relation to the Urban and Rural Alternatives, respectively. Encroachments into the 100-year floodplain areas by the project alternatives are summarized on Table 4.14 (pg. 4-51). The document states that longitudinal encroachments within the 100-year flood plain areas were avoided during the development of project alternatives and transverse encroachments were minimized where possible by crossing floodplains and wetlands at their narrowest locations.

The Urban Alternative has six transverse and no longitudinal encroachments. The Rural Alternative has ten transverse and no longitudinal encroachments. None of the encroachments involve designated floodways. Although both Build Alternatives have floodplain impacts, the Draft EIS indicates that mitigation will be provided to offset the impacts.

EPA recommends that the Final EIS include information regarding floodplains associated with the preferred alternative and what type of additional avoidance or minimization efforts will be needed to meet regulatory floodplain standards. The Final EIS should also include mitigation commitments for unavoidable floodplain impacts.

Section 4(f) Resources

EPA has no substantial comments regarding Section 4(f) resources (recreational and parkland). There are currently no existing recreation facilities or parks that would be impacted by the proposed Build Alternatives. Continued coordination with appropriate agencies should take place to insure that there are no resources of these types which would be impacted by the project.

Indirect and Cumulative Impacts

The indirect effects of a project on land use and the subsequent environmental effects can be both temporally and geographically more extensive than the direct impacts of transportation projects. The analysis of these changes and the subsequent environment impacts is important to understand the total impact of the federal action on the natural, cultural and socioeconomic environment. Consideration of indirect and cumulative impacts requires the assessment of an area's ability to absorb additional development, the loss of businesses or residences, or if the watershed can absorb the loss of additional wetlands.

The Draft EIS lacks a quantitative and qualitative analysis of cumulative impacts on resources. The document states that secondary and cumulative impacts of the project are expected to be minimal. EPA does not agree with that assessment and has concerns that indirect and cumulative impacts have not been properly assessed and described in the document. FDOT should carefully assess both indirect and cumulative effects on the surrounding area and the effect that this project has on resources of concern when selecting the final preferred alternative.

The Final EIS should include the indirect and cumulative effects associated with the preferred alternative. It should also include avoidance, minimization and mitigation measures that will be utilized to help reduce indirect and cumulative effects. A critical aspect of the Final EIS will be to provide the local communities with a better understanding of the land use implications that will be expected from implementation of the project. With this information,

these communities can develop future land use plans and potential zoning regulations that could be enacted in concert with development of the transportation infrastructure. All factors, including direct, indirect and cumulative effects, must be evaluated and considered when determining the least environmentally-damaging practicable alternative that will fulfill the project purpose and need.